New England
BUSINESS REVIEW
FEBRUARY 1961
Published monthly by the FEDERAL RESERVE BANK of BOSTON

The Chemical Industry's Importance to New England

Industries do not grow in isolation. The products of one are the raw materials of another. The chemical industry is firmly enmeshed in this network of interdependence. Its products are used by every other manufacturing industry, and to a lesser extent by other industries such as construction, agriculture, services and government.

New England's chemical industry has been growing rapidly since the end of World War II. Regional employment in this industry has increased by 20 percent in the region since 1947, while total manufacturing employment has declined 5 percent. Value added (the increase in the value of a product as it is transformed from a raw material into a useful, final product) has also been increasing at a rapid rate, rising 80 percent from 1947 to 1958.

Nevertheless, this industry represents a small proportion of the region's total manufacturing activity. In 1958 the chemical industry accounted for only 3 percent of total value added by manufacture in New England. Moreover, the chemicals group, employing 34,000, currently accounts for only 2.4 percent of all manufacturing employment.

(Continued on page 2)

Also Retail Sales Shifts in New England: 1954-1958, *page 5.*
The Immediate Economic Impact of Higher Education in New England, *page 7.*

For its size, however, the industry invests heavily in plant and equipment in the region. Over the past five years capital outlays by chemical manufacturers have averaged about 6 percent of total capital expenditures in New England. These outlays also provide work for other industries such as machinery and construction.

MAJOR NEW ENGLAND CHEMICAL INDUSTRIES IN 1958

	Rank By Value Added		Value Added As a Percent of Shipments		Capital Expenditure Per Dollar of Value Added (cents)		Capital Expenditure Per Employee (dollars)	
	N. E.	U. S.	N. E.	U. S.	N. E.	U. S.	N. E.	U. S.
Plastic Materials	1	4	36%	47%	14.2	16.4	$1,816	$2,765
Pharmaceutical Preparations	2	1	n.a.*	72	n.a.*	3.6	n.a.*	808
Cleaning and Polishing Preparations	3	8	51	48	3.4	2.6	764	486
Toilet Preparations	4	6	64	64	2.2	2.1	492	481
Soap and Glycerin	5	7	55	53	1.5	2.0	394	622
Other Organic Chemicals	6	2	31	54	7.3	18.5	836	3,981
Paints and Varnishes	7	5	46	40	3.2	4.0	385	509
Glue and Gelatin	8	18	48	43	9.0	7.7	1,196	945

*n.a. not available.
Source: U. S. Department of Commerce, Census of Manufactures.

Contributions to the region's welfare are made in other ways as well by the chemical industry. It is one of the region's basic industries, doing much fundamental research. New England, with its pool of trained scientists in universities, private research agencies, and research centers of major manufacturers, provides a suitable climate for the interchange of ideas that can contribute to the conduct of chemical research. Research centers of several major chemical producers in such fields as plastics and pharmaceuticals are now located in Massachusetts and Connecticut. Moreover, a survey last spring by this bank of capital expenditure plans for 1960 by New England manufacturers indicated that the chemical industry planned to allocate about a tenth of its capital outlays to new research facilities, a greater proportion than any other major industry.

For the chemicals group in New England, lack of raw materials and high transport and fuel costs are locational disadvantages. On the other hand, New England has important industrial markets. Several important industries such as textiles, electrical machinery, shoes and paper, use large quantities of chemicals, and various plastic materials.

Future growth of the region's chemical industry depends largely upon the growth of other industries. The region's growing electronics industry, for example, will provide an expanding market for such chemical products as plastic materials and industrial gases for use in the production of transistors. Electronics is a major user of nitrogen and argon (gases which are extracted from the air) in its newly developing semiconductor field for the production and refinement of germanium and silicon. Presently, this industry accounts for about one-third of the total industrial gas use in the region.

Composition of New England's Chemical Industry

Because of its lack of raw materials, New England produces very little of the basic chemicals such as the bulky and heavy inorganic chemicals, e.g., sulfuric acid and soda ash. About one-third of the region's production is in plastic materials and in a miscellaneous organic chemicals group which includes dyes, solvents and various organic acids. These are termed intermediate chemical products because they are produced from the basic chemicals and are to be used in further manufacture. The major portion of New England's production, however, is in finished products such as drugs, cosmetics and paints.

The accompanying table shows the eight subgroups in which New England's chemical industry is concentrated. They account for more than three-fourths of the value added by the chemicals group in New England.

Products from the two intermediate groups, plastic materials and organic chemicals, are consumed in large quantities by the region's major manufacturing industries in a variety of applications. They are required in the textile industry for dyeing and treating fabrics, in the paper industry for coating and treating purposes, and in the shoe industry for tanning leather and making heels, soles and luggage. In addition, they are essential in the manufacture of a wide variety of electronic equipment for insulating and structural purposes.

The six groups producing finished products are also users of these intermediates in manufacturing and packaging their products. This illustrates an outstanding feature of the chemical industry. It is a major consumer of its own products, absorbing about one-fifth of its output. Because chemical producers supply and purchase from each other, a cluster of chemical firms tends to develop in an area. This gives the industry a built-in growth impetus; the larger the chemical industry is in a region, the larger it *tends* to become.

Producers of finished chemical items tend to locate near their markets. Their value added is a large proportion of their total value of shipments. Producers in these industries, therefore, are not heavily dependent upon their source of

raw materials in selecting their plant locations. Intermediate chemical producers, on the other hand, must give greater weight to their raw material sources in locating their plants since value added is a smaller proportion of their value of shipments than in the finished product groups.

Another characteristic of the six industries producing finished chemicals in New England is that their capital outlays per dollar of value added produced are below the average for all chemical industries.

In other words, New England tends to specialize primarily in those chemical industries which are labor-intensive, manufacturing products which require a relatively large proportion of labor to capital. The plastic materials industry, however, is a notable exception to this tendency.

Plastic Materials

The manufacturing of plastic materials has a long history in New England; the first commercial plastic material, celluloid, was produced in the region as far back as 1868. Since then the industry has grown rapidly as new materials – for example, polyethylene, polystyrene, epoxy, and phenolic – have been introduced and as markets have grown in New England and the nearby states of New York, New Jersey and Pennsylvania. In recent years, however, growth of the regional industry has begun to lag behind the national pace.

From 1947 to 1958 employment in New England's plastic materials industry increased by 54 percent and value added more than tripled. Nationally, employment rose 80 percent and value added increased more than four times.

Today the market for plastic materials is shifting west, following the movement of population in that direction and the industrial development of that area. Growth in other areas does not mean, however, that a substantial market no longer exists in the east. Accounting for one-third of the nation's manufacturing activity, the New England and Middle-Atlantic states continue to provide substantial markets for plastic materials.

Another reason for the slowing of growth in New England is the changing structure of the industry. One of the major raw material sources for producing plastic materials is the gases thrown off from refining petroleum. The cost of transporting these gases without converting them into intermediate products is relatively high in most instances. For example, ethylene which is the intermediate used to produce polyethylene, one of the fastest growing plastics, is more economically produced near the refinery. Producers of ethylene chemicals can, therefore, be expected to locate near refineries.

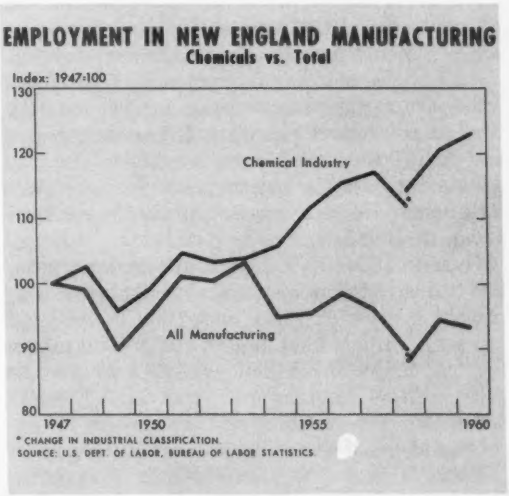
Capital expenditures of plastic materials producers reflect this shift in markets and production. Plant and equipment expenditures of New England's plastic materials manufacturers were $10.4 million in 1958, only 7 percent of the nationwide total. When expressed as an amount per employee, New England producers spent $1,816, while the national average was $2,765.

There is a substantial market for plastic materials in New England. The plastic products industry, which is classified as outside the chemicals group, converts these materials into such products as toys, housewares, hose and pipe, floor and wall coverings, skylights and hundreds of other items.

Plastic products is one of the region's important industries, employing over 19,000 workers. The regional industry accounts for 16 percent of the nation's value added in plastic products, and is keeping pace with the growth nationally, both showing a 49 percent growth in value added from 1954 to 1958.

The productivity of New England's portion of the plastic products industry, however, is below the national average, as measured by the amount of value added per manhour worked. But the regional industry pays a lower wage. The average yearly wage in New England was 10 percent less than the United States average in 1958. The lower wage offsets the lower productivity. Consequently, the amount of value added per dollar of payroll is higher than in any other region of the country.

New England provides a sizable market for plastic products, including not only industries outside the chemicals group and households, but also important chemical industries. For example, plastic containers are being increasingly used to package pharmaceutical, cosmetic and synthetic detergent preparations; these are products in which New England concentrates.



Pharmaceutical, Cleansing, and Toilet Preparations

The pharmaceutical industry in New England primarily produces products such as vitamins, analgesics and antiseptics – finished in a form for final consumption. A large capital investment in complex, specialized equipment is not a prerequisite for manufacturing such products.

No absolute figures – only ranges which indicate its relative position – are available for New England's segment of this industry. One characteristic of the industry nationally, however, is that its capital expenditures per dollar of value added have been low, relative to other chemical industries, in recent years. Thus, pharmaceuticals provide an example of the region's specialization in labor-intensive chemical products.

The cleaning and polishing preparations industry provides a market for plastics in the form of containers for packaging its liquid detergent products. In recent years there has been a shift from soap to detergents. Detergent production has been growing rapidly in New England. The region's proportion of the value of packaged, synthetic detergent shipments rose from 4 percent in 1954 to 7.5 percent in 1958.

Most of New England's toilet preparations industry is engaged in producing such items as hair preparations, talcum powders, cleansing creams and hand lotions. The development of the regional industry is comparable with the national pattern. New England conforms closely to the national average in value added per dollar of payroll and capital expenditure per employee.

Paints and Varnishes, Glue and Gelatin

The paints and varnishes and the glue and gelatin industries, along with others of the chemicals group, use plastic materials directly. There are many nonrigid, nonmoulded applications for plastic materials as ingredients in paints, glue, protective coatings, adhesives and synthetic fibers.

In the postwar period synthetic resins have largely replaced natural resins in the manufacture of paints and varnishes. Likewise, the glue and gelatin industry has made substantial use of plastic materials in recent years. Both of these industries have been growing in the region at or above the national rate.

Over the 1947-1958 period, the region's paint and varnish industry has shown the same percentage growth in value added as the national industry. Value added in glue and gelatin manufacture, on the other hand, shows a 21 percent gain in New England over this period, while nationally there was a 1 percent decline.

Over 95 percent of the region's glue and gelatin industry is located in Massachusetts. This industry manufactures gelatin for photographic, pharmaceutical and edible purposes, in addition to adhesives, cements and glues for industrial purposes such as shoe manufacturing.

The major portion (about three-fourths) of the region's paints and varnishes industry is also located in Massachusetts. More than two-thirds of this industry's shipments are to retail establishments, with the remainder going into industrial product finishes and special coatings.

Paints and varnishes is another industry in which the region is less productive than nationally. But, as in plastic products, the regional industry pays a much lower average yearly wage, so that the amount produced per dollar of payroll is slightly above the national average.

Compressed and Liquefied Gases

The composition of the chemicals group changes as research discovers new products and new processes. Some indication of the future composition in the region is indicated by recent capital spending patterns.

The compressed and liquefied gas industry is highly capital-intensive. This industry, which produces such gases as argon, nitrogen and oxygen, is small in New England at the present time, but is growing at a rapid rate because markets for these gases are expanding. In 1958 it accounted for less than 1 percent of the region's value added by chemical manufacture, and for only 2 percent of the value added in the compressed and liquefied gas industry nationwide. According to the U. S. Department of Commerce, in 1959 only one of the 34 producers of argon and nine of the 188 establishments producing nitrogen were based in New England.

The regional industry, however, is clearly expanding. In 1954, capital investment in New England's compressed gas industry, on a per-employee basis, was only one-half the national average. By 1958, this figure had swelled to twice the national average, or $7,953 per employee. As further indication, employment in the New England industry increased by 24 percent during the 1954-1958 period, while employment nationwide increased by only 1 percent.

This recent expansion is due in part to the growth of the electronics industry in New England. Sales of nitrogen gas to electronic firms in the region have increased at a rapid rate in recent years. Some major nitrogen gas producers have recently announced plans for further expansion of their production and distribution facilities in New England to supply the growing needs of the electronics industry.

Thus, chemicals depend on other industries and other industries depend on chemicals. The growth of industries is intertwined.

Retail Sales Shifts in New England: 1954–1958

Final data on New England's retail sales in 1958 have recently become available.[1] Although the data are more than two years old, they are worth studying both because there are no comparable current data and because they permit analysis of changes in the retail spending habits of New Englanders. With data for other Census of Business years they give a hint of current and future expectations in the important area of consumer spending.

The first insight afforded by these data concerns the change in the magnitude of retail spending. Consumers in New England spent nearly $12.5 billion in the region's retail establishments in 1958, about 14 percent more than they did in 1954. Nationally, retail sales in 1958 totaled $199.6 billion, an amount 17.5 percent greater than in 1954. The greater national than regional gain is partly due to the nation's more rapid population growth. This, plus a slightly greater propensity to spend income in retail stores nationally than in New England, more than offset New England's 2 percent faster growth in per capita personal income.

Per Capita Sales Increased

The average New Englander spent $1,224 in the region's retail outlets in 1958, 10 percent more than in 1954. Nationally, per capita retail sales increased by the same percentage but amounted to only $1,155. In both New England and the nation, the proportion of personal income spent in retail establishments declined 4 percentage points from 1954 levels. Both decreases extend the decline noted in 1954 from the high level of 1948 when consumers were still satisfying desires for goods that had been in short supply or nonexistent during World War II.

Although New Englanders' per capita retail spending, as shown in the accompanying chart, has exceeded that of the nation in each of the five Census of Business years, the proportion of per capita personal income represented by such spending has varied from 2 to 4 percentage points lower than the nation's.

Average Annual Sales Rise

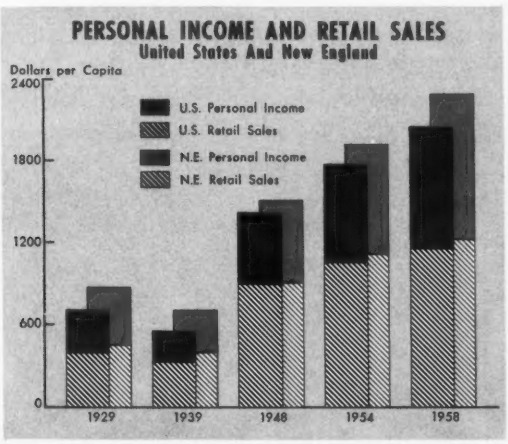
As was true between 1948 and 1954, the average annual sales volume per retail establishment increased between 1954 and 1958, both regionally (14 percent) and nationally (12 percent). Average sales per outlet approximated $111,000 in 1958 in both New England and the United States. Among the 11 major retailing groups, in New England average sales per establishment range from a low of about $46,500 for eating and drinking places to a high of $338,000 for automotive dealers. Among the store groups, the dollar volume per outlet increased fastest between 1954 and 1958 in the food group as supermarkets continued to increase their share of food sales at the expense of smaller units, although the rate of displacement slowed. These data suggest that the small neighborhood grocery store is fighting a losing battle with the large modern supermarket in most cases. Some of the less sizable and less modern supermarkets also find the competition too stiff.

Replacement of smaller units by larger ones, mergers, and urban renewal programs tend to offset store development in suburban areas, keeping New England's store population relatively steady. In 1958 there were 112,701 retail outlets in this region, 106 below the total for 1954. Nationally, however, the count increased 4 percent, reflecting greater population growth particularly in less developed areas than was the case in New England. A major element affecting New England's retail structure is the fact that much of the exodus of people from the cities in the region is to previously established communities which already have existing shopping facilities. In the relatively younger areas of the country, particularly the southwest, much of the growth occurs in sparsely populated sections with few or no retail facilities in existence.

Gains Vary by Type of Store

The 1958 spending patterns of New Englanders differed from those in 1954. Some of these differences are traceable to effects of the recession in 1958 and others are indicative of longer-run changes in consumer interest. A major casualty

[1] **Data in this article are based on the final reports of the 1958 Census of Business, Retail Trade, prepared by the Bureau of the Census, U. S. Department of Commerce, Washington, D. C.**



of the recession was new car sales. The number of new car registrations was 22 percent lower than in 1954. In contrast there were sharp gains in sales of used cars and parts and accessories to keep older cars going. These increases, plus sizable gains in sales of boats and accompanying equipment (which are recorded in the automotive grouping by the Census) were only able to little more than offset the new car sales loss. As a result, automotive group sales were only 1 percent greater than in 1954. That the 1958 experience was unusual is confirmed by the much improved levels of new car registrations for 1959 and 1960. Increased sales of boating equipment, however, is of recent origin and may be expected to continue if incomes rise, leisure time increases, and interest in boating continues to swell.

Sales of other durable goods dealers also rose less rapidly than total retail sales. The proportion of retail spending allotted to durables dropped to 24 percent, the smallest ratio of the three post-war census counts. Shortages of durables caused by the war have been satisfied and replacement demand is not yet sufficient to restore the earlier high sales levels. Expected family formation step-up in years ahead will lead to increased demand for durables.

Gasoline service stations enjoyed the greatest sales gain – 28 percent – of all 11 major types of establishments. This performance principally reflects the gain of nearly one-sixth in the number of cars on the road in the region over the four-year span, as well as recession-inspired repairs.

General merchandise sales increased 21 percent as department stores combatted discount house price competition more effectively than in the immediate post-war years. The shift by consumers from durable goods buying benefits these stores as they generally carry much higher proportions of soft goods than of durables.

Sales of stores in the food group rose 19 percent and accounted for 26 percent of the region's total retail sales in 1958 compared to 25 percent in 1954. Since population growth was only 4 percent and food prices advanced 6 percent over this period, the remainder of the gain is largely due to changes in consumer tastes toward better quality, more expensive and completely prepared foods, as well as the growing proportion of non-food lines being sold by food stores. Larger stores, more self-service and more suburban locations are all trends which continued during the period covered and which are still continuing. All of these last three phenomena also apply to the drug stores of the region as does a continual increase in nondrug lines being sold; these help explain their 20 percent sales gain.

Other groups of retail outlets expanding their shares of the retail sales dollar in New England were eating and drinking places (7.2 to 7.3 percent) and the miscellaneous group of other retail stores (12.6 to 12.9 percent). Major gains in the latter group were made by book, sporting goods, farm and garden supply, camera and photographic supply, liquor and optical goods stores. Much of the improved position of these retailers is directly related to increases in income and leisure time.

Suburban vs. Central City Sales

Retail sales in New England's 20 Standard Metropolitan Statistical Areas in 1958 rose to $8.8 billion and 70 percent of total retail sales in New England. Comparing the 18 SMSA's for which data are available for both 1954 and 1958, sales increased 15 percent. By contrast, sales in the central cities of these areas rose only 7 percent. In the suburban parts of these areas, however, sales rose 25 percent, as stores continued to follow the population out of the central cities.

Sales in the Boston area reached $3.44 billion, nearly 28 percent of the New England total. This volume makes the Boston area rank seventh in the nation in retail sales, as it also does in population. Providence area sales rank second in New England, contributing 7 percent of the region's sales volume. The Hartford area accounts for slightly over 5 percent of New England's total sales and the Springfield-Holyoke area for about 4½ percent.

NEW ENGLAND RETAIL SALES

1958 sales volume (millions of dollars) and percentage change from 1954

Type of Establishment	Maine		N. H.		Vermont		Mass.		R. I.		Conn.		New England	
Food Stores	$289	18%	$201	26%	$116	26%	$1612	14%	$237	15%	$817	28%	**$3272**	**19%**
Eating, drinking places	45	10	38	19	20	11	516	18	69	8	220	16	**908**	**16**
General merchandise group	107	7	54	23	45	32	665	18	101	29	291	31	**1263**	**21**
Apparel, accessories stores	59	18	45	18	20	11	448	10	72	7	215	10	**859**	**11**
Furniture, appliance, home-furnishings	34	−3	27	8	16	−6	280	6	43	13	168	9	**568**	**7**
Automotive group	173	5	116	9	77	5	826	−1	131	−6	457	4	**1780**	**1**
Gas service stations	73	20	49	23	30	20	336	30	56	22	192	34	**736**	**28**
Lumber, building materials, hardware, farm equipment dealers	60	15	42	14	31	19	311	−1	54	4	187	3	**685**	**3**
Drug, proprietary stores	27	4	19	36	10	25	207	18	35	13	109	27	**407**	**20**
Other retail stores	148	10	103	6	74	16	784	19	107	9	392	23	**1608**	**17**
Nonstore retailers	16	0	10	11	5	0	257	18	25	−4	54	10	**367**	**14**
Total retail sales	**1031**	**11**	**704**	**17**	**444**	**17**	**6242**	**13**	**930**	**10**	**3102**	**19**	**12453**	**14**

The Immediate Economic Impact of Higher Education in New England

Higher education is an important source of income in New England. Each year the region's colleges, universities and professional schools attract almost $120 million more into the region than people in New England pay for education in other parts of the country.

In the fall of 1958, New England institutions of higher learning enrolled about 213,000 students. Of this number, about 166,000 were full-time students — 143,000 undergraduates, and 23,000 graduate students. Nearly 53,000 full-time students came from outside the region. They accounted for about a third or more of full-time enrollment in each state except Maine and Rhode Island. The opportunities for graduate study, especially in Massachusetts and Connecticut, were particularly attractive to non-New Englanders who made up 53 percent of those studying for advanced degrees.

The financial operations of New England's colleges and universities and the supplementary expenses of the students attending them have an immediate economic impact on the region's economy.

Expenditures

Operating expenditures of New England's colleges, universities and professional schools amounted to about $400 million in 1958. In the same year, New England's colleges spent over $50 million on new plant and equipment. College students expended another $90 million off the campus for room, board, books, recreation, travel and other items. Thus, total spending was $540 million — a sum which exceeds the annual expenditures of most of the more important nationally known New England industrial firms.

The pattern of institutional expenditures varies from state to state. In Massachusetts, with its wealth of research facilities, more money is spent for research than for instruction. The expenses of operating such auxiliary enterprises as residence halls, dining halls, bookstores and related functions are relatively lower in Massachusetts and Connecticut, where the proportion of commuting students is higher than in other states.

Income

Institutions of higher education are benefiting from an increasingly large income from the Federal government. Between 1950 and 1958, Federal funds granted to Massachusetts institutions went up from $34 million to $81 million. Most of the increase was earmarked for research. In the other New England states, however, there has been a decrease from $14 million to $10 million in Federal money. This is largely due to a drop in the number of veterans in attendance and the change to fixed payments to veterans rather than direct payments to institutions.

The Impact on New England

In 1958, New England higher education institutions attracted $193 million from outside the region. These funds include payments for tuition, board, room and other charges as well as supplementary expenses of students from other areas, private gifts and grants from non-New England sources, and income from the Federal government.

Partially offsetting this inflow of funds into the region are the expenditures for the estimated 25,000 New England students attending college in other parts of the country, and for gifts and grants by New Englanders to institutions in other areas. Estimated outflow of these payments to other areas amounted to about $75 million.

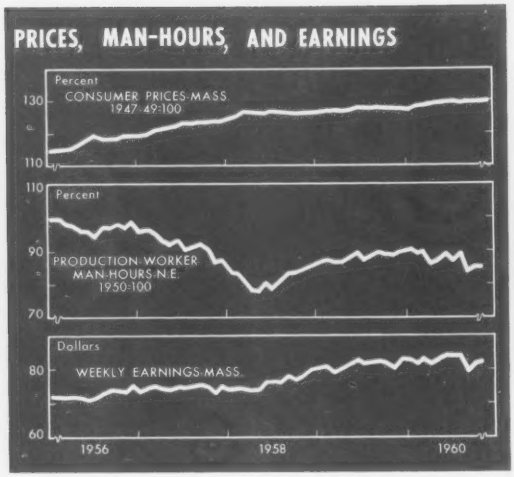
On balance, then, higher education provides an additional $118 million of annual income to New Englanders, and helps to maintain the per capita personal income level about 11 percent above the national level.

NET BALANCE OF PAYMENTS OF NEW ENGLAND INSTITUTIONS OF HIGHER EDUCATION, 1957-58
(millions of dollars)

Current Income from outside New England		$162
Tuition and fees	$35	
Room, board, etc.	24	
Federal funds	91	
Private gifts and grants[1]	12	
Supplementary Expenses of Students from outside New England		31
Total Current Funds Drawn into New England by Institutions of Higher Education		**$193**
Less:		
Expenditures of New England Students in Other Areas		63
Gifts and Grants[1] by New Englanders to Institutions in Other Areas		12
Total Current Funds Drawn from New England for Higher Education Purposes in Other Areas		**75**
Estimated Net Annual Contribution of Institutions of Higher Education to the New England Economy		**$118**

[1] For Use On Current Account

This article is drawn from a study, "The Immediate Economic Impact of Higher Education in New England," made by Professor Francis S. Doody, Director, Boston University Bureau of Business Research, under a research grant from the Federal Reserve Bank of Boston. A complete copy of the report is available from the New England Council, Statler Building, Boston 16, Massachusetts.



MANUFACTURING INDEXES (seasonally adjusted)	MASSACHUSETTS (1950–52 = 100)			NEW ENGLAND (1950–52 = 100)			UNITED STATES (1957 = 100)		
	Dec. '60	Nov. '60	Dec. '59	Dec. '60	Nov. '60	Dec. '59	Dec. '60	Nov. '60	Dec. '59
All Manufacturing	111	121	114	110	116	117	103	104	109
Primary Metals	90	94	99	82	89	101	71	74	114
Textiles	38	44	45	57	61	66	n.a.	102	111
Shoes and Leather	117	138	101	114	134	116	n.a.	n.a.	105
Paper	97	106	106	117	127	129	n.a.	109	113

The December Index may overstate the change from November because manhours for December were estimated from data for the week which included the severe snowstorm of December 12.

	NEW ENGLAND	Percent Change from:		UNITED STATES	Percent Change from:	
	Dec. '60	Nov. '60	Dec. '59	Dec. '60	Nov. '60	Dec. '59
BANKING AND CREDIT						
Commercial and Industrial Loans ($ millions) (Weekly Reporting Member Banks)	1,424	− 2	+ 4	31,855	+ 1	+ 5
Deposits ($ millions) (Weekly Reporting Member Banks)	4,557	+ 1	+ 2	112,383	+ 2	+ 2
Check Payments ($ millions) (Selected Cities)	9,708	+ 1	− 4	257,022	+ 9	− 2
Consumer Installment Credit Outstanding (index, 1950–52 = 100)	263.5 s.r.	+ 1	+10	291.2	+ 1	+ 9
TRADE						
Department Store Sales (index, seas. adj. 1947–49 = 100)	128	− 1	− 1	147	+ 4	+ 1
Department Store Stocks (index, seas. adj. 1947–49 = 100)	147	− 3	+ 1	n.a.	n.a.	n.a.
EMPLOYMENT, PRICES, MAN-HOURS, & EARNINGS						
Nonagricultural Employment (thousands)	3,679	+ 1	0	53,553	0	− 1
Insured Unemployment (thousands) (excl. R. R. and temporary programs)	195	+34	+46	2,634	+31	+45
Consumer Prices (index, 1947–49 = 100)	129.8 (Mass.)	0	+ 2	127.5	0	+ 2
Production-Worker Man-Hours (index, 1950 = 100)	80.1	− 6	−11	91.5	− 4	−10
Weekly Earnings in Manufacturing ($)	78.97 (Mass.)	− 4	− 4	90.02	0	− 2
OTHER INDICATORS						
Construction Contract Awards ($ thous.) (3-mos. moving averages Oct., Nov., Dec..)						
Total	139,350	−11	+16	2,974,326	− 4	+15
Residential	63,535	−11	+ 5	1,173,712	−10	− 2
Public Works	14,885	− 7	+26	649,383	+11	+58
Electrical Energy Production (index, seas. adj. 1947–49 = 100)*	223	+ 3	+ 5	278	+ 5	+ 4
Business Failures (number)	42	−10	− 2	1,353	+ 3	+25
New Business Incorporations (number)	1,042	+34	−12	14,681	+18	−11

*Figure for last week of month

n.a. = not available

s.r. = series revised